

VERITAS Software
Product Feature Summary
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Executive Summary: this document intends to provide a summary on the key features of the VERITAS software products that are being offered to fulfill requirements of MetOc and FNMOC. Our products are extending the automation of many tasks in the data and storage management area, which saves manpower costs and greatly reduces the reactive mode of the technical staff. Policies, privileges and procedures can be established up front using best practices for the program.

The configurations that we are quoting for both the SIPRNET and NIPRNET include the VERITAS Foundation Suite (Volume Manager and File System); our High Availability (HA) product called FirstWatch; and our NetBackup (NBU) software. The product's benefits are defined as being in three key areas:

1. Performance: the products are providing a number of performance benefits for increasing system throughput such as tuning tools for the disks and allowing large file sizes in the file system. Automates many tasks.
2. Reliability: providing key features such as software RAID (striping and mirroring) and failover services to servers. Stops Unix system panics. No interruption of user's work in order to perform maintenance tasks.
3. On-Line Everything: all of our tools and features can be enabled while the system users are on-line, i.e. the systems administrator does their work without bringing the system down. This has been a major determinant in our success in mission-critical programs.

Following is a list of the key features on a product-by-product basis, many of which are unique to VERITAS.

VERITAS Foundation Suite, consisting of Volume Manager and File System

A. Volume Manager

- Provides for software RAID (0, 1, 0+1, 5) implementations across real or logical volumes.
- on-line monitoring tools
- on-line reconfiguration of drives and their partitions
- automatic restoration of data redundancy when disks fail
- maintains much better recovery from disasters
- this will be the standard volume manager on NT also

B. File System

- performs true journaling in an intent log so all transactions are known at any point of failure, greatly reducing recovery times.
- It is an extent-based file system, so files are not chopped up into small blocks but instead kept together for much faster performance, thereby providing much faster throughput.
- on-line file system changes and resizing
- automatically tunes I/O policy to the disks data layout

VERITAS NetBackup

- central management of the entire backup facility, saving manpower and allowing automated tools and privileges. One of our clients, NorTel, went from 16 man-years supporting backup functions down to 2.5 man-years, after installing NetBackup
- on-line backup if necessary in a 24 x 7 environment. Employs a throttle manager to maintain a piece of network usage to ensure that service is not degraded.
- Fastest backup and restore of essential data with a wide range of disaster recovery options. can “customize” these supplied options to your programs needs.
- Performs incremental block backups. About 80-90% of files may not change in any given day, so incremental backups can be done in a fraction of the time, and automatically.
- Provides for user-initiated backups and restores
- Many of the Global 2000 have committed to this product worldwide, recent wins include Boeing, Oracle, Lucent, DISA DMC's.

VERITAS FirstWatch (High Availability option)

- a simple and elegant way to fail over services like applications to another server, which allows the users to continue their work.
- 7000 sites worldwide with this product installed
- starts up applications on the second server within seconds of noticing a system failure.
- Also provides for manual failover so that a systems administrator can do updates and other service adjustments while the users are on-line.
- In essence provides an automated fault management system

Summary: This product set allows for substantial savings to the Navy, and reduces the need to react to problems through the use of automated response tools. This in turn allows the technical staff to spend its' time on planning and optimization of the programs IT resources.